

**Channel Islands National Marine Sanctuary
Marine Reserves Working Group Meeting**

Monday, January 10, 2000

(Day One)

8:30 A.M. – 4:30 P.M.

Veterans Memorial Building

122 West Cabrillo Boulevard

Santa Barbara, California

Meeting Summary

In Attendance:

Patricia Wolf, Chair

Ed Cassano, Co-Chair

Lucky Brown

Warner Chabot

Marla Daily

Gary Davis

Robert Fletcher

Craig Fusaro

Dale Glanz

Neil Guglielmo

Mark Helvey

Deborah McArdle

Michael McGinnis

Chris Miller

Tom Raftican/Merit McRae

Steve Roberson

Alicia Stratton

Dr. Joan Roughgarden (Science Panel)

Bruce Steele (SAC)

Michael Eng, Facilitator

John Jostes, Facilitator

Staff from CINMS/DFG: Anne Walton,
Sarah Fangman, Sean Hastings, Satie Airame,
Ben Waltenberger, Cathryn Wild, Mike
Murray, Jesse Swanhuyser, John Ugoretz,
Dave Parker, Paul Riley.

-
- 1. Welcome and Introductions:** Co-Chairs Patty Wolf and Ed Cassano led the introductions of those present. The meeting was described as the first interactive information-sharing and work session between the MRWG, Science Panel and Socioeconomic Team. Matt Pickett was introduced in his current position of Assistant Sanctuary Manager and alternate co-chair for Ed Cassano. Matt will assume both the position of Sanctuary Manager, and the MRWG co-chair following Ed's transfer from the Sanctuary Manager position in the spring. Members of the Working Group and the public attendees introduced themselves. Dr. Joan Roughgarden a member of the Science Panel, as well as Bruce Steele, of the Sanctuary Advisory Council was also present.
 - 2. Adoption of Meeting Summary from December 9, 1999 Working Group Meeting:** John Jostes led the group in a review of the meeting summary of its December meeting and handed out supplementary meeting materials to replace the chart on page 3 of the draft meeting

summary. Dale Glantz suggested minor changes and corrections. The changes were accepted by a consensus of the Working Group.

3. Review of Agenda: Facilitator John Jostes led the Working Group through a summary of the day's agenda, outlining what would be covered in the morning and afternoon sessions, arrangements for lunch, and the time allocated to each item. Time allocated to item 8, scheduled for 3:00 pm was reallocated to a discussion of developing a strategic approach to information needs and gaps as they relate to the development of a recommendation addressing Marine Reserves.

4. Process and Schedule Update: John Jostes provided handouts to the Working Group including a new overview of process stages, revised process flowchart covering the Goal Setting and Information Needs Stage, revised summary of meeting dates and topics (2 pages), and an outline of the components of a possible recommendation to the SAC regarding Marine Reserves. The one-page outline was suggested as the basic format that would serve as the model of content for a recommendation for the SAC. He then summarized the relationships among the handouts noting that the Working Group was engaged in an iterative process of crafting a recommendation based upon a "building block" approach. The approach envisioned entailed a series of interim products that were emerging from their own deliberations over the past three meetings and future scheduled meetings related to information needs, goal setting, criteria development, identification of options and development of a package of proposals related to size, shape, location, timing, duration and implementation. After providing the overview, he then summarized the changes to the Itinerary of Meeting Dates and Topics (Version 3), dated January 6, 2000. Substantive changes included the following points:

- Extension of the overall process timeline from June 2000 to approximately September / October 2000.
- Addition of two additional evening Public Forums to take place the evening preceding the MRWG February and March meetings - Feb. 22, 2000 (SB Location) to address user profiles and socioeconomic characterization of the Channel Islands National Marine Sanctuary; and March 15, 2000 (SB Location) to address the ecological characterization of the Sanctuary.
- Set the following MRWG meeting dates:
 - April 13, 2000, 8:30 am - 5:00 pm
 - May 11, 2000, 8:30 am - 5:00 pm
 - June 8, 2000, 8:30 am - 5:00 pm.

The public forum to be held January 20, 2000 will provide an important opportunity for Working Group members to reach out to their constituencies, increase awareness of and build support for the process, and the consensus approach. Building support throughout the process will help ensure support for the final recommendation. Comments received from the public at the forum will be recorded, archived, and presented to the MRWG. MRWG members will be needed at the forum to assist with facilitation. The forum will probably be structured around small groups to enhance input and discussion of issues. The forum is

intended to enhance public input opportunities early in the process and incorporate this input into the final recommendation.

Meeting dates and topics were reviewed. Working Group members were requested to submit additional blackout date information to the facilitators for the additional months now on the schedule. The formation of several task groups was suggested to expedite work on specific issues related both to process and content of the recommendation.

Mike Eng noted that since last meeting, the facilitators and MRWG Chairs had met with the Science Panel to review the process to date, identify opportunities for collaboration and clarify the respective roles of each of the bodies. Together, the chairs and facilitators reaffirmed the responsibility of the Working Group to craft specific options and a recommendation, and the Science Panel to advise them on technical matters related to ecological characterization and the effectiveness of options meeting the stated goals and objectives currently being refined. The facilitators also noted the observations by members of the Science Panel that for the process to yield meaningful results, it would likely require more time than originally anticipated. Finally, the facilitators identified the need for one or more task groups (e.g., public involvement, goal refinement, etc.) of the Working Group to develop interim products and provide feedback so as to make the most efficient use of meeting time for the group as a whole.

The facilitators suggested to the Working Group the potential benefits of allowing them a considerable degree of latitude to prepare working drafts of potential language for the MRWG to refine. It was their opinion that such an approach would maximize the efficiency of the group as a whole and offer starting points for meaningful discussion that would lead to the timely development of a recommendation to the SAC. Authorization from the Working Group for the facilitators and the sanctuary staff to prepare working drafts for their consideration would be sought during tomorrow's meeting. These drafts proposals would attempt to synthesize and integrate the views expressed by the Working Group during their meetings.

5. **Update on Input from Science Panel Meeting on December 17, 1999:** Sean Hastings provided an oral report to the Working Group summarizing his memo contained in the meeting materials previously distributed to Working Group members. He highlighted the important substantive and procedural aspects of the meeting including concerns voiced by Science Panel members regarding level of specificity and clarity of the preliminary goals and objectives developed by the Working Group at its December 9 meeting, expectations about roles (educational versus developing specific options), the appropriateness of utilizing GIS, their own mission statement, and the implications on process schedule, timing and efficiency issues. Satie Airame was introduced as the Post Doctoral Researcher hired to support the Science Panel.
6. **Presentation of the Socioeconomic Team on the Status of Socioeconomic Information for the CINMS Region:** Bob Leeworthy and Peter Wiley provided the Working Group with handouts summarizing their respective presentations. Bob Leeworthy reviewed the

available literature and data that relate to commercial fisheries within and adjacent to the Sanctuary waters. He reported that data on recreational fishing is available, and they feel they have acquired a good understanding of the data and literature related to this aspect. In contrast, little data is available on commercial fishing, sport diving, private boating (including fishing from these boats) and other forms of recreational use in this region is sparse, and new data will need to be collected and analyzed to sufficiently inform the decision-making process. The goal is to spatialize use by group and thus assess costs to each user group that will be associated with various reserve alternatives. He briefly reviewed the materials submitted by the Environmental Defense Fund as well as others, noting that while helpful to some degree, the existing economic studies that he has reviewed are seriously deficient in terms of providing information that allows them to translate catch and revenue into income and employment figures at a scale less than 10 x 10 mile units of measurement. He also identified the potential benefits and costs associated with marine reserves, as well as the methods of valuation that serve as inputs into a socioeconomic analysis of effects.

Chris Miller raised concerns regarding the conclusions of the EDF Report and the importance of the facilitators' reviewing the objectivity of materials that are submitted to the Working Group in draft form. John Jostes noted that the materials provided by the EDF were offered in the context of good faith and procedures outlined in the groundrules were followed. He also noted that the facilitation team would make a practice of ensuring that all studies submitted for distribution were marked as "draft" unless they have a more formal context. Bob Leeworthy concluded his commentary with a commitment to work with the Working Group and fishermen in general to obtain catch and revenue data in finer units of geographic resolution.

Pete Wiley then made a presentation regarding the recreation industry and recreational uses of the Channel Islands National Marine Sanctuary. He noted that while there have been a number of studies performed, information is limited and confined to a level that does not easily translate into a useful geographic resolution for analysis. He made a commitment to work with members of the Working Group and other experts in an attempt to refine the level of detail and determine appropriate methods of aggregating data to be useful to the reserve assessment process and fill information gaps.

In initiating a preliminary discussion of data gaps and information needs, the facilitators noted that the second and third public forums planned in February and March were intended to supplement the information that the socio-economic team was collecting. The February Public forum, scheduled for 2/22 at 7:00 pm in Santa Barbara would provide an opportunity for user groups to provide additional information to the process regarding activities within their industry sector that might impact or be impacted by the establishment of marine reserves in the Channel Islands National Marine Sanctuary. Likewise, a similar forum is in the planning stages to address ecological characterization issues on March 15th.

The discussion concluded with members of the Working Group raising issues related to the implications of incomplete data sets and information on the assessment of marine reserve

impacts from an economic or fiscal perspective. Further discussion of this topic was deferred to the afternoon and to the joint meeting to follow on Tuesday, January 11th.

- 7. Developing Preliminary Goals and Objectives for Marine Reserves in the Channel Islands National Marine Sanctuary:** The majority of the afternoon session was dedicated to continuing the Working Groups' consideration and adoption of goals and objectives to guide the development of marine reserves scenarios or options. Building on the earlier discussion of the morning (see "Agenda Item #5 above), initial feedback from the Science Panel, and products of December's meeting, Satie Airame, the Sanctuary's post-doctoral researcher provided the Working Group with an overview of her integration of the goals and objectives identified by subgroups at the last Working Group meeting. The presentation was the first in a series of interim work products that are expected to be developed on an ongoing basis by the Facilitators, working with Sanctuary staff and the Post-Doc.

After Satie's presentation, there was a brief discussion of the definition of goals versus objectives. The Working Group came to a consensus on the following working definitions of terms:

Goal: A broad statement about a long-term desired outcome which may, or may not be completely obtainable.

Objective: A measurable outcome that will be achieved in specific timeframe to help accomplish a desired goal.

The facilitators then led the Working Group through a step-by-step process of first agreeing to the major "themes" that would serve as categories for goals and objectives, and then word-smithing specific statements of goals and/or objectives that would be included within those themes. Using this framework, the Working Group focused on those themes or categories that could benefit from and/or inform the joint meeting with the Science Panel on Jan. 11th. After considerable discussion, the working Group adopted by consensus the following five themes or categories of Goals and Objectives:

- Ecosystem Biodiversity
- Natural and Cultural Heritage/Recreation
- Education/Research
- Fisheries Conservation
- Reserve Administration

With the assistance of Satie Airame, and Dr. Joan Roughgarden from the Science Panel, the Working Group then reframed the six draft goals and objectives identified under "Ecosystem Diversity" into two, all-inclusive statements that gained the support of all present. The consensus Goal Statements adopted for discussion purposes with the Science Panel during Jan. 11th were:

Ecosystem Biodiversity

1. To protect and sustain representative marine ecosystems.

The term “ecosystems” is understood to encompass the following components:

- A. Habitats
- B. Species
 - 1. Genetic Diversity
 - 2. Larval Sources
 - 3. Stable Stock Structure
- C. Linkages between Life Stages
 - 1. Trophic Structure
 - a. Predator/Prey Relationships
 - b. Competition
- D. Functions
 - 1. Production
- E. Dynamics
 - 1. Resistance and Resilience

- 2. To protect and sustain species of concern.

Several terms, including “species of concern” are to be further defined by the Working Group. Time for the meeting expired before discussion of Fisheries Conservation goals could begin. The remainder of the discussion under this agenda item was deferred to the afternoon Joint Session on Jan. 11th, with the intention of focusing on the theme of Fisheries Conservation. The Facilitators asked members of the Working Group to consider whether they wanted to serve on one or more task groups to further refine the goals and objectives that could not be addressed as a part of the two day meeting.

8. Discussion of Strategic Approach to Filling Data Gaps and Information Gathering:

The Working Group briefly explored how it could most effectively utilize its time with the Socioeconomic Team and Science Advisory Panel in identifying critical data gaps and information needs - particularly in regard to implications on the quality of and confidence in a its recommendation to the SAC. The Group decided to dedicate a portion of Day Two's afternoon session to the subject, either by meeting amongst themselves, or in concert with the Science Panel.

- 9. Other Matters:** The Working Group did not have sufficient time remaining to discuss additional questions for consideration by the Science Panel or Socioeconomic Team. The facilitators concluded the meeting with a request for feedback from the Working Group regarding the accomplishments of the day as well as observations on how the process is working. Craig Fusaro suggested that the facilitators review the group's accomplishments in light of the topics outlined on the agenda and make adjustments in the future such that the agenda was more realistic in terms of how much can be accomplished within a given meeting.

The meeting was adjourned at 5:10 pm.

Summary of Action Items

1. Adopted Meeting Summary as Revised
2. Received Process Update and adopted revised meeting schedule and dates through June 2000
3. Facilitation Team requested authorization to craft proposals and interim work products for consideration by Working Group in order to expedite discussion and decision making process.
4. Requested Facilitation Team to clearly mark all preliminary materials provided for distribution as "draft".
5. Adopted definitions of working "goals" as distinct from "objectives".
6. Adopted five themes or categories of goals to serve as a method of framing goals and objectives.
7. Adopted specific language regarding Ecological Biodiversity Goal

Relevant Upcoming Meeting Dates:

January 20, 2000, 7:00 pm - Public Forum on Process, Goals and Objectives, Ventura Location

CANCELLED - February 22, 2000, 7:00 pm - Public Forum on User Profiles, Socioeconomic Data Needs - Santa Barbara Location - CANCELLED

Set April 13, May 11 and June 8, 2000 as MRWG Meeting dates.

Meeting Handouts (not included in meeting packet):

1. Reprint of Flowchart developed by Dale Glantz
2. Process Flowcharts and Summaries developed by the Facilitation Team
3. Socioeconomic Information developed by Bob Leeworthy and Peter Wiley

**Channel Islands National Marine Sanctuary
Marine Reserves Working Group Meeting**

Tuesday, January 11, 2000

(Day Two)

8:30 A.M. – 4:30 P.M.

Veterans Memorial Building

122 West Cabrillo Boulevard Santa Barbara, California

Draft Meeting Summary

In Attendance:

Working Group Members:

Ed Cassano, Co-chair

Patty Wolf, Co-chair

Matt Pickett (alternate)

Craig Fusaro

Neil Guglielmo

Locky Brown

Mark Helvey

Rod Fujita (alternate)

Steve Roberson

Merit McCrae (alternate)

Deborah McArdle

Dale Glantz

Alicia Stratton

Bob Fletcher

Marla Daily

Chris Miller

Mike McGinnes

Socioeconomic Team:

Bob Leeworthy

Peter Wiley

Science Panel:

Joan Roughgarden

Libe Washburn

Matt Cahn (chair)

Bob Warner

Pete Haaker

Dan Reed

Dan Richards

Steve Gaines

Dave Siegel

Russ Vetter

Steve Schroeter

Ed Dever

Steve Murray

Facilitators:

John Jostes

Michael Eng

Staff from CINMS/DFG:

Anne Walton, Sarah

Fangman, Sean Hastings,

Satie Airame, Ben

Waltenberger, Cathryn

Wild, Mike Murray, Jesse

Swanhuyser, John

Ugoretz, Dave Parker.

Members of the public.

1. Welcome and Introductions (Ed Cassano and Patty Wolf, Co-chairs).

2. Overview of Agenda and Follow-up Discussion on Process. (John Jostes, Michael Eng):

The facilitators reported that they had received feedback from Working Group members suggesting that the process might be moving too quickly, and a possible need for additional deliberation. The Overview of Process Stages handout was reviewed. Of the stages depicted as boxes on the handout, the Structure and Content stage has been completed. The process is now in the Goal Setting and Information Needs stage.

3. CINMS Staff Presentation on GIS-based Decision Support Tool (Ben Waltenberger, Satie Airame): Ben Waltenberger described the fundamental concepts of Geographic

Information Systems (GIS) and illustrated via a slide presentation. Some advantages and disadvantages of GIS were explained. The audience was given an update on the conceptual development of the GIS Decision Support Tool for this process, which is expected to include the development of “knowledge layers”, “criteria” and a customizable system to “weight” these criteria.

Key aspects of the approach included the following:

- Knowledge layers will be developed from data gathered in response to the questions developed to ask the Science Panel.
- Each layer will depict the answer to a question or set of related questions, per unit of space on the GIS map.
- The criteria will represent the ability of the area to meet the desired goals of the process. This allows modeling of the probability of meeting the criteria.
- The customizable weighting system will allow the MRWG to place more, or less, importance on each of the criteria. An important step for the Working Group will be reaching consensus regarding these weighting factors. The weights determined by the group will be essential in determining the final recommendation.

MRWG and Science Panel members were asked for feedback on the concepts of the GIS tool, as well as input on additional ideas for knowledge layers, discussion will continue on the GIS tool. MRWG and Science Panel members provided several comments at this time:

- Need to correlate land-based activities on the islands with potential consequences on the adjacent marine systems. This should include both current use and planned future developments.
- Focus on species/habitats unique to the islands.
- Value of disseminating information and tool via CD or the Internet so those MRWG members could use this tool to communicate with their constituencies.
- Need to consider historic species distribution as well as current distribution, via records from Department of Fish and Game.
- Regarding the model, if the probabilities of meeting the goal of each layer are added, the result will be statistically invalid.
- The group agreed that they would further discuss the usefulness of and appropriateness of the GIS tool.

4. Presentation on Current Status of Research and Understanding of Marine Reserve Functions. (Bob Warner) The work from the National Center for Ecological Analysis and Synthesis (NCEAS) Marine Reserves Working Group and other recent research was reviewed. Most significant points:

- Conservation/biodiversity reserves are not necessarily incompatible with fishery enhancement reserves.

- Self-sustainability of reserves, through larval retention, is not incompatible with export-based models of fishing enhancement reserves.
- Applying scientific criteria for evaluation of reserves should be a rigorous and transparent process.

The following were suggested as evaluation criteria for reserves:

- Biogeographic representation
- Habitat representation
- Human threats
- Natural catastrophes
- Size (export functions, viability, distribution, management)
- Connectivity
- Vulnerable habitats
- Critical life stages
- Species or populations of special concern
- Exploitable species
- Ecosystem function and linkages
- Ecological services for humans

Discussion topics focused on defining concepts, design factors, adult spillover versus larval export, proximity of habitats, availability of data on distribution of habitats and species.

5/6. Joint Dialogue on Goals and Objectives, Relevant Questions (members of Working Group, Science Panel, Socioeconomic Team): The intent of this dialogue was to reach agreement on goals developed by the MRWG so that the independent work by the Science Panel can begin. A handout was distributed presenting the working definitions for the terms “goal” and “objective” and the two goals statements as developed by the MRWG in the previous meeting. (See item 7, Day 1)

Discussion of the goal statements relevant to ecosystem biodiversity ensued regarding definition of and modification of several terms, concepts, and design issues. The MRWG and Science Panel each held a brief caucus. Upon reconvening, the following goal statement was accepted and approved by the Working Group regarding Ecosystem Biodiversity.

"Ecosystem Biodiversity:

To protect representative marine habitats, ecological processes and populations of concern."

The Science Panel and MRWG then caucused separately for approximately 45 minutes. A number of products and discussion points emerged from these caucuses. *Please see the attached Science Panel caucus summary.* The goal topic area of “Fisheries Conservation” was changed to “Sustainable Fisheries”. The term "fisheries" is understood to include both

commercial and recreational fisheries. The following revised goal statement was adopted by a consensus of the Working Group:

"Sustainable Fisheries

- To assist in the recovery of depleted populations.
- To provide insurance against fisheries management uncertainties
- To help sustain fisheries outside the reserves
- To achieve long-term productivity with minimal short-term negative impacts to all users."

A draft list of species of concern was then developed, and adopted by consensus to include: kelp, urchins, abalone, nearshore rockfish, lobster, sheephead, calico, cow cod, bocaccio, cabezon, ling cod, squid, deep water coral, whitefish, sand bass, black seabass.

Task groups were formed to continue work on developing draft goals on the remaining general topic areas that will then be presented to the entire MRWG for refinement as necessary.

- Socioeconomic: Craig Fusaro, Warner Chabot, and Mark Helvey. Mark Helvey as point person.
- Natural and Cultural Heritage/Recreation: Marla Daily, Deborah McArdle, Bruce Steele. Deborah McArdle as point person.
- Education/Research: Chris Miller, Sarah Fangman, and Julie Goodson. Sarah Fangman as point person.

Finally, the MRWG offered several additional perspectives and suggestions to guide the interim work of the Socioeconomic team. Several points were made relevant to the Socioeconomic Team:

- The Socioeconomic Team was asked to seek approval of contracted help from the MRWG. Three contractors were approved in advance: Mick Kronman, Craig Barilotti, and Carrie Pomeroy.
- The need to consider the limited range of trip distances, and related costs, for sport fishing, diving, etc operators working out of the regional harbors was noted.
- A scale of 1 nautical mile appears to suit the needs of both the Science Panel and the Socioeconomic Team.
- As mentioned previously, the impacts of current, historic and future (to the extent possible) land-based human activities on the adjacent marine environment should be considered.
- Synthesis of existing use from National Park concessionaires may be possible.
- Estimation of long-term economic costs and benefits would be useful.

7. **Next Steps:** Additional input to this process will be received from the public at the forums to be held January 20th and February 22nd. These forums will be opportunities for Working

Group members to network with their constituencies, other constituencies, and the public at large. A public outreach task group was formed which will focus on preparing for the upcoming forums. Task group members are Warner Chabot, Alicia Stratton, Tom Raftican, Marla Daily, Steve Roberson, Craig Fusaro and Bruce Steele. Task group members named Tom Raftican as "point person". A conference call is scheduled for the morning of Wednesday January 19th between members of this task group.

The currently scheduled second joint meeting with the Science Panel needs to be changed to accommodate the need to develop interim products and conduct research. A sub-committee of members from both the Science Panel and the MRWG was suggested as a means of most effectively and efficiently coordinating the activities of each group that would meet between meetings to continue discussion and expedite progress.

The Facilitation team also asked for and received authorization from the Working Group to prepare working drafts of potential language for the MRWG to refine and or adopt in an attempt to make the most efficient use of limited meeting time. Such efforts will focus on synthesizing and integrating the views expressed by Working Group members within and between meetings into proposals for consideration by the MRWG.

8. Meeting Adjourned. 5:15 pm.

Summary of Action Items

1. Working Group members approved by consensus specific language relating to the goal of "Ecosystem Biodiversity"
2. Working Group members approved by consensus specific language relating to the goal of "Sustainable Fisheries"
3. Working Group members adopted a draft list of "species of concern" for consideration.
4. Working Group members established task groups to continue work on developing draft goals and objectives related to natural and cultural Heritage/Recreation, Education/Research, and Reserve Administration. Socio-Economics was added as another goal category.
5. Established a Public Outreach Task Group to assist with public forums, stakeholder outreach and networking opportunities.
6. Working Group members agreed to submit additional black out dates to facilitators for schedule planning through September of 2000.
7. Facilitation team received authorization from the Working Group to develop interim products and provide feedback so as to make the most efficient use of meeting time in future meetings.